



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/672,320

09/26/2003

Heinrich Potthoff

0329-0043

8401

26568

7590

11/13/2007

COOK, ALEX, MCFARRON, MANZO, CUMMINGS & MEHLER LTD  
SUITE 2850  
200 WEST ADAMS STREET  
CHICAGO, IL 60606

EXAMINER

SUHOL, DMITRY

ART UNIT

PAPER NUMBER

3725

MAIL DATE

DELIVERY MODE

11/13/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/672,320

Applicant(s)

POTTHOFF, HEINRICH

Examiner

Dmitry Suhol

Art Unit

3725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-11 and 13-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,6-9 and 15 is/are rejected.
- 7) ☒ Claim(s) 4,5,10,11,13,14,16 and 17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 6-9 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leeuwestein '187 in view of Takeda et al '127. Leeuwestein discloses a roll stand containing all the claimed elements including, with respect to claims 1 and 2, at least one roll (2) arranged on a roll shaft (4) rotatably mounted in the stand housing (1) and connected in a rotationally fixed manner to the roll shaft via a frictional connection by means of a radial interference fit having a tapered seat (col. 7, lines 24-29). A fluid medium supply having an outlet in the region of the interference fit, as required by claim 3, is described in col. 7, lines 29-34 and shown in figure 3.

Leeuwestein further discloses an embodiment (figure 1) which teaches a structural set up such that a rolling annulus (2a) may be quickly and easily interchanged through the use of sleeve elements (6) and a tie rod (5) having a threaded end (5a), a nut (5b) bearing against the end of the roll shaft and a cap (4b) where an internal and external thread hold the tie rod and end together (col. 5, lines 55-56). Therefore it would have been obvious to one having ordinary skill in the art at the time of the claimed invention to have incorporated the structural features of the embodiment of figure 1 (as

stated above) into the embodiment of figure 3 for the purpose of providing a quick and easy construction for changing out the rolling annulus (2a) as such a combination would yield predictable results.

Takeda is relied upon to teach that it is known to provide a bar/wire roll stand with rollers having an interference fit with a roll shaft where a shaft has a fluid passageway (12) extending through the shaft (figure 2) having an inlet (12A) spaced from the rollers (2) and hub (3) and an outlet located in the region of the hub (3) for the purpose of dislodging the roller (2) from the shaft by use of a pressure fluid such as oil. Therefore it would have been obvious to incorporate the passageway of Takeda including the positioning of the inlet and outlet in the device of Leeuwestein for the purpose of dislodging the rollers from the shaft where the connection between the two is an interference fit since the simple substitution of one known element (structure for delivering oil) for another would yield in predictable results.

Regarding claim 15, the use of a fluid as required is disclosed in col. 7, lines 29-45, while the structural features as claimed and the step of releasing the sleeve elements would have been obvious in view of the introduction of embodiment of figure 1 as stated above.

#### ***Allowable Subject Matter***

Claims 4-5, 10-11, 13-14, 16-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Response to Arguments***

Applicant's arguments filed 10/31/07 have been fully considered but they are not persuasive. Applicants argue that there is no suggestion to combine the embodiments of figures 1 and 3. In response the examiner points out that the embodiment of figure 1 clearly teaches a construction which allows for a rolling annulus to be quickly and easily changed out and therefore it would have been obvious to incorporate such construction in the embodiment of figure 3 since such a combination would yield predictable results.

Applicants further argue that the structure for delivering oil to the hubs of Leeuwestein is different from the newly claimed structure. In response it is pointed out that Takeda has been introduced to teach that it is known to provide such structure in a device like that of Leeuwestein.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Suhol whose telephone number is 571-272-4430. The examiner can normally be reached on Mon - Friday 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on (571) 272-4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3725

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dmitry Suhol/  
Primary Examiner  
Art Unit 3725

ds